



Water-Data Report CA-2005

10271200 BISHOP CREEK ABOVE POWERPLANT NO. 6, NEAR BISHOP, CA

Owens Lake Basin

LOCATION.--Lat 37°21'00", long 118°27'42" referenced to North American Datum of 1927, in SE ¼ SE ¼ sec.9, T.7 S., R.32 E., Inyo County, Hydrologic Unit 18090102, on left bank, adjacent to Powerplant No. 6 tailrace, and 3.8 mi west of Bishop.

DRAINAGE AREA.--104 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1990 to current year. If records for Bishop Creek Powerplant No. 6 Conduit (station 10271060) are combined with this record, a record equivalent to that published October 1936 to September 1990 as "Bishop Creek below Powerplant No. 6, near Bishop", can be obtained. Monthly and yearly mean discharge prior to October 1969, published in WSP 2127.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 4,510 ft above NGVD of 1929, from topographic map.

REMARKS.--Flow regulated for power development by South Lake, Lake Sabrina, and Intake No. 2 Reservoir (stations 10270700, 10270870, and 10270875, respectively), combined capacity, 20,311 acre-ft, and five powerplants. Water is diverted into basin via Birch-McGee Diversion (station 10270900). Water is diverted out of basin via Abelour Ditch (station 10270985) for irrigation and domestic use. Diversion to Bishop Creek Powerplant No. 6 (station 10271060) bypasses this station and is published as a line item below. Diversion to Bishop Creek Powerplant No. 6 provided by Southern California Edison Company. See schematic diagram of Bishop Creek Basin.

COOPERATION.--Records collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project no. 1394.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 453 ft³/s, July 23, 1998, gage height, 3.77 ft; no flow on many days in July and August 1992.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	57	54	58	58	0.50	0.70	0.55	0.50	55	148	112	2.4
2	54	53	56	56	0.51	0.69	0.55	0.49	63	162	104	1.9
3	53	54	55	35	0.51	0.60	0.55	0.47	56	173	87	1.4
4	53	52	56	1.0	0.51	0.70	0.54	0.47	49	166	63	1.1
5	53	52	56	0.89	0.51	0.70	0.55	0.54	48	162	56	18
6	52	52	57	0.94	0.51	0.57	0.55	0.44	43	167	52	87
7	52	55	57	0.74	0.51	0.55	0.54	0.49	49	174	52	100
8	52	63	54	0.68	0.51	0.55	0.51	0.39	50	179	51	97
9	52	61	55	0.79	0.51	0.55	0.51	0.41	53	183	53	100
10	52	59	54	0.60	0.51	0.55	0.51	0.40	50	179	56	102
11	53	58	52	0.63	0.51	0.55	0.51	0.41	51	174	60	97
12	55	56	51	0.55	0.51	0.55	0.51	0.39	55	165	58	97
13	55	56	51	0.55	0.51	0.55	0.49	0.38	62	160	60	101
14	56	54	51	0.55	0.51	0.55	0.52	0.93	73	142	51	101
15	54	55	53	0.55	0.51	0.55	0.50	0.39	89	127	51	99
16	59	55	52	0.55	0.51	0.59	0.51	7.8	110	102	56	99
17	60	54	52	0.51	0.51	0.55	0.51	1.9	121	91	58	97
18	58	53	52	0.51	0.53	0.60	0.49	1.3	108	125	53	95
19	59	53	52	0.56	0.53	0.70	0.49	7.5	100	240	37	96
20	59	52	52	0.58	0.51	0.67	0.51	14	94	177	19	98
21	59	52	51	0.49	0.54	0.55	0.51	8.7	104	222	16	102
22	56	54	51	0.51	0.55	0.67	0.50	14	110	234	8.3	99
23	57	53	51	0.51	0.52	0.72	0.51	24	125	247	1.7	99
24	58	52	51	0.51	0.51	0.69	0.50	35	124	242	3.0	97
25	55	53	50	0.51	0.63	0.55	0.50	31	124	234	3.0	95
26	55	52	50	0.51	0.70	0.55	0.50	44	121	223	3.0	100
27	55	53	51	0.51	0.70	0.56	0.49	51	113	195	2.6	106
28	54	50	52	0.50	0.70	0.55	0.50	61	122	161	2.4	100
29	54	49	52	0.49	---	0.55	0.50	63	125	129	2.4	100
30	53	59	53	0.84	---	0.55	0.50	45	137	126	2.4	99
31	54	---	51	0.55	---	0.55	---	44	---	120	2.4	---
Total	1,708	1,628	1,639	166.11	15.08	18.51	15.41	460.30	2,584	5,329	1,236.2	2,487.8
Mean	55.1	54.3	52.9	5.36	0.54	0.60	0.51	14.8	86.1	172	39.9	82.9
Max	60	63	58	58	0.70	0.72	0.55	63	137	247	112	106
Min	52	49	50	0.49	0.50	0.55	0.49	0.38	43	91	1.7	1.1
Ac-ft	3,390	3,230	3,250	329	30	37	31	913	5,130	10,570	2,450	4,930
Diversion, in acre-feet, to Bishop Creek Powerplant No. 6												
	1.1	2.0	0.08	3,290	3,040	3,830	4,600	7,510	8,650	8,640	8,230	1,000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2005, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	12.3	15.6	10.5	6.29	2.87	5.63	7.45	10.9	31.5	67.8	30.0	12.9
Max	55.1	68.1	79.1	38.6	14.9	53.1	66.0	44.9	86.7	240	171	82.9
(WY)	(2005)	(2002)	(2002)	(1997)	(2002)	(2002)	(2002)	(2002)	(1997)	(1995)	(1995)	(2005)
Min	0.11	0.19	0.19	0.17	0.21	0.19	0.18	0.12	0.06	0.04	0.05	0.08
(WY)	(1993)	(1991)	(1993)	(1993)	(1993)	(1992)	(1992)	(1992)	(1992)	(1992)	(1992)	(1992)

10271200 BISHOP CREEK ABOVE POWERPLANT NO. 6, NEAR BISHOP, CA—Continued**SUMMARY STATISTICS**

	Calendar Year 2004	Water Year 2005	Water Years 1991 - 2005
Annual total	8,655.18	17,287.41	
Annual mean	23.6	47.4	17.9
Highest annual mean			47.4
Lowest annual mean			0.35
Highest daily mean	127	Jun 8	Jul 24, 1998
Lowest daily mean	0.25	Aug 12	Jul 27, 1992
Annual seven-day minimum	0.42	Jan 26	0.00
Maximum peak flow		283	Jul 23, 1998
Maximum peak stage		2.96	Jul 23, 1998
Annual runoff (ac-ft)	17,170	34,290	13,000
Annual diversion (ac-ft) a	47,070	48,810	
10 percent exceeds	59	120	62
50 percent exceeds	3.3	51	1.5
90 percent exceeds	0.46	0.51	0.20

^a Diversion, in acre-feet, to Bishop Creek Powerplant No. 6.

